

RESIDENTIAL ELECTRICITY

8 Quarters

This program provides the basic principles of electrical power distribution technology. The student is prepared for employment or advancement in a field of electrical installation in new buildings, rewiring of old buildings, electrical maintenance and repair, and troubleshooting of electrical equipment and installations. Upon completion of a 24-month curriculum in Electricity, the graduates are qualified for the following positions:

- *Electrician
- *Electrical Appliance Repairman
- *Field Estimator
- *Laboratory Test Technician

The surrounding and working conditions of the electrical trade are favorable to the worker. It offers opportunities for indoor and outdoor work. Working hours and conditions permit the electrical worker to find pleasure in doing a first-class job. On many jobs, the electrical worker has the opportunity to deal with customers; therefore, personal conduct of the craftsman affects future advancement of the electrical field and industry.

The opportunity is open for the electrical worker to become a first-class journeyman by understanding new phases of the electrical field. From first-class journeyman, he can advance to the position of foreman or contractor.

RESIDENTIAL ELECTRICITY

First Quarter

- EL 111 - Orientation
- EL 112 - Ohm's Law
- EL 162 - Basic Wiring Techniques Lab
- EL 113 & 163-Connecting Switches & Connecting Switches Lab

Second Quarter

- EL 121 & 171-Wiring Circuits and Wiring Circuits Lab
- EL 172 - Wiring for Lights and Outlets

Third Quarter

EL 131 & 181-Residential Wiring and Installation I & Residential
Wiring and Installation Lab I

EL 182 - Installing Special Purpose Circuits I

EL 132 - Blueprint Reading I

Fourth Quarter

EL 142 - Residential Wiring and Installation II

El 143 - Installing Special Purpose Circuits II

EL 144 - Blueprint Reading II

Fifth Quarter

EL 291 - Residential Wiring and Installations III

EL 292 - Installing Special Purpose Circuits III

EL 211 - Blueprint Reading III

Sixth Quarter

EL 293 - Maintenance

EL 294 - Repairing Electrical Appliances I

EL 221 - Estimating and Electrical Specifications I

Seventh Quarter

EL 271 - Repairing Electrical Appliances II

EL 231 - Estimating and Electrical Specifications II

Eighth Quarter

EL 281 - Installing Remote Control Lighting Systems

EL 232 - Applying the National Electrical Code

ELECTRICITY COURSE DESCRIPTIONS

EL 111-Orientation

This course reviews school and departmental policies and regulations and gives a brief history of the course. Current career opportunities are discussed and students are acquainted with the use and care of tools and equipment used

in the shop. Safety practices and precautions are emphasized.

EL 112-Ohm's Law

Theory lessons on basic electrical concepts of current, voltage, resistance and electrical polarity.

EL 162-Basic Wiring Techniques Lab

Lab classes in which students will make joints and splices, insulate joints, connect wires to terminals and lugs.

EL 113 & 163-Connecting Switches & Connecting Switches Lab

A comprehensive theory and lab combination class that deals with connecting lighting switches such as single pole, three-way and four-way.

EL 121 & 171-Wiring Circuits and Wiring Circuits Lab

Theory and lab instruction on measurement of devices connected in series, parallel and series-parallel.

EL 172-Wiring for Lights and Outlets

A series of lab classes on different wiring methods such as non-metallic cable, armored cable, electrical metallic tubing, surface raceway and rigid conduct.

EL 131 & 181-Residential Wiring and Installation I & Residential Wiring and Installation Lab I

Theory and lab classes on the installation of branch circuits, service entrances, switches, receptacles, fixtures and main disc connects.

EL 182-Installing Special Purpose Circuits I

Lab classes where the student concentrates on installing branch circuits for ranges, pumps, dryers, water heaters, dishwashers, heating and cooling systems and garbage disposals.

EL 132-Blueprint Reading I

Theory classes on reading house wiring blueprints, symbols and outlets.

EL 142-Residential Wiring and Installation II

Advanced theory lessons on grouping outlets and service

entrance calculations.

EL 143-Installing Special Purpose Circuits II

A theory class that introduces advanced principles and procedures on branch circuit calculations for ranges, dryers, water heaters, pumps and garbage disposals.

EL 144-Blueprint Reading II

Theory classes on how electrical wiring information is conveyed to the electrician at the construction site. Symbols and notations used on electrical drawings are emphasized.

EL 291-Residential Wiring and Installations III

Live work classes for the advanced student on the installation of branch circuits, service entrance, switches, receptacles and fixtures.

EL 292-Installing Special Purpose Circuits III

A continuation of live work classes on the installation of special purpose circuits for ranges, dryers, heating and cooling pumps, dishwashers, garbage disposals and water heaters.

EL 211-Blueprint Reading III

Advanced classroom instruction on how specifications are used in estimating costs making electrical installations.

EL 293-Maintenance

This course provides live work experience on troubleshooting, checking wiring and making the necessary repairs and adjustments.

EL 294-Repairing Electrical Appliances I

Students will apply the principles and procedures learned in the classroom. Live work projects and shop demonstrations will be assigned on disassembling and assembling irons, toasters, mixers, rotisseries, ranges, dryers, water heaters and automatic dishwashers.

EL 221-Estimating and Electrical Specifications I

A study of the complete process of estimating and using general specifications.

EL 271-Repairing Electrical Appliances II

Lab Classes on procedures for analyzing troubles and making necessary repairs on irons, toasters, mixers, rotisseries, range, dryers, and automatic dishwashers.

EL 231-Estimating and Electrical Specifications

This course prepares students in writing specifications.

EL 281-Installing Remote Control Lighting Systems

Lab classes on how to install a complete system using principles and procedures studied in the classroom.

EL 232-Applying the National Electrical Code

Theory classes on how to apply the code to all wiring conditions.

SECRETARIAL

4 Quarters

The Secretarial program offers the men and women an opportunity to develop those skills, abilities, and an understanding that will enable them to enter, perform, and progress in a position in the modern business office. It also provides them with the occupational intelligence that will enable them to fit into and find job satisfaction in the labor force of our complex and dynamic economy.

The secretary performs a variety of clerical duties, such as taking and transcribing dictation, processing mail, filing, receiving and screening telephone callers, etc.

Secretaries and stenographers are employed throughout the economy. About two-thirds of them work in banks, insurance companies, real estate firms, government agencies, and other establishments providing services to the public. Most specialized stenographers and secretaries work for doctors, lawyers, and other professional people.

SECRETARIAL

First Quarter

- SEC 111 - Typewriting I
- SEC 112 - Shorthand I
- SEC 162 - Shorthand Lab I
- SEC 113 - Business English
- SEC 114 - Business Filing & Record Control
- SEC 115 - Business Math

Second Quarter

- SEC 121 - Typewriting II
- SEC 122 - Shorthand II
- SEC 172 - Shorthand Lab II
- SEC 123 - Business English II
- SEC 124 - Office Machines I
- SEC 125 - Business Math II

Third Quarter

- SEC 131 - Typewriting III
- SEC 132 - Shorthand III
- SEC 182 - Shorthand Lab III
- SEC 133 - Business English III
- SEC 134 - Secretarial Office Procedures I
- SEC 135 - Office Machines II
- SEC 136 - Business Law

Fourth Quarter

- SEC 141 - Typewriting IV
- SEC 142 - Shorthand IV
- SEC 192 - Shorthand Lab IV
- SEC 143 - Business English IV
- SEC 144 - Secretarial Office Procedures II
- SEC 145 - Accounting

SECRETARIAL COURSE DESCRIPTIONS**SEC 111-Typewriting I**

An introductory course designed to acquaint the students with typewriter parts and functions; proper typewriting techniques; the touch system of covering the letter, number and symbol keys. Also, to build speed and accuracy relative to straight copy control.

SEC 112-Shorthand I

A study of basic principles of the Gregg Shorthand System, including the alphabet, brief forms, phrasing principles, and abbreviation principles. Development of skill in reading, introduction of dictation techniques, and development of pretranscription skills are included in this course.

SEC 162-Shorthand Lab I

Practical applications of Shorthand I theory lessons.

SEC 113-Business English

Designed to give the student a thorough background and/or review of our language structure. Emphasis is placed on vocabulary study.

SEC 114-Business Filing & Records Control

This course provides a knowledge of the rules, procedures, and techniques of the four basic filing systems; also, terminology, transfer, storage, retrieval systems and records control in a business setting. A filing practice set provides practical application.

SEC 115-Business Math

Designed to give students increased competency in the basic fundamentals of math. Emphasis is placed on adding, subtracting, multiplying, and dividing whole numbers, fractions, and decimals, and on solving problems by using aliquot parts.

SEC 121-Typewriting II

A continuation of skill building along with practical application of basic skills in centering, business letters, tabulations, simple reports and composing at the typewriter.

SEC 122-Shorthand II

Continuation of Shorthand I mastery of basic shorthand theory. Development of accuracy and speed in writing shorthand from dictation, and an introduction to transcription from printed shorthand.

SEC 172-Shorthand Lab II

Practical applications of Shorthand II theory lessons.

SEC 123-Business English II

A continuation of Business English I with emphasis on parts of speech and sentence structure. Continues to stress vocabulary.

SEC 124-Office Machines I

Designed to enable the student to become proficient in the use of electronic printing and display calculators. Emphasis is on calculating or solving typical business problems through the processes of adding, subtracting, multiplying, and dividing.

SEC 125-Business Math II

A continuation of Business Math I. This course is designed to help students learn mathematical concepts through practical application in business situations. Emphasis is placed on percentages, simple interest, cash and trade discounts, banking procedures, payroll records and deductions, and markup.

percentages, simple interest, cash and trade discounts, banking procedures, payroll records and deductions, and markup.

SEC 131-Typewriting III

This course introduces the students to production typewriting. Students devote more time to problem solving a variety of communication problems. Letters with special features, manuscripts with footnotes, and tabulations are included. Further improvement of basic speed and accuracy skills.

SEC 132-Shorthand III

The development of skill in taking dictation of unfamiliar material at progressively higher rates of speed with emphasis placed on mailable transcripts.

SEC 182-Shorthand Lab III

Practical applications of Shorthand III theory lessons.

SEC 133-Business English III

Continuation of sentence structure with emphasis on punctuation and proofreading. Introduction of letter writing.

SEC 134-Secretarial Office Procedures I

This course has two purposes: to aid the student in developing professional attitudes (Human Relations) and to aid in demonstrating skillful competence in performing many different duties through simulated office activities with end-of-part exercises and projects.

SEC 135-Office Machines II

This course is a continuation of Office Machines I with emphasis on stencil and fluid duplicating procedures.

SEC 136-Business Law

A study of business law helps the student develop a better understanding of the law as it applies to business situations and transactions. Emphasis is placed on our system of courts, contracting, property ownership, sales, and employee/employer relationships.

SEC 141-Typewriting IV

Production measurement is emphasized in this final course.

Specialized office (general, accounting, executive, legal, medical, government, and technical) typewriting is provided in a simulated arrangement. The main objective is to achieve vocational competency.

SEC 142-Shorthand IV

Development of speed and accuracy in taking dictation and in transcribing. Machine transcription is introduced.

SEC 192-Shorthand Lab IV

Practical applications of Shorthand IV theory lessons.

SEC 143-Business English IV

All areas of communication. An intensive final course that includes correct form, placement, grammar, punctuation, and spelling for effective mailable business correspondence of all types such as business letters, memorandums, reports (formal and informal), news releases, minutes, etc.

SEC 144-Secretarial Office Procedures II

A continuation of Secretarial Office Procedures I.

SEC 145- Accounting

This course provides the students with the basic understanding of accounting principles and practices. Emphasis is placed on analyzing, journalizing, posting, and preparing financial reports.

SEWING MACHINE MECHANICS

5 Quarters

Industrial Sewing Machine Mechanics is a 15-month instructional program that provides both basic and advanced technology in the repairing of industrial sewing machines and mechanical accessories, such as: cloth cutting machines, spreading machines, cloth fusing machines, die cutting machines, pneumatic accessories, seam equipment, and electrical components.

When training is completed, the graduates are qualified to work as sewing machine repairmen, machine salespersons, or maintenance mechanics.

There is a great demand for journeyman helpers, apprentices, and master sewing machine mechanics in industries and neighborhood repair shops. Mechanics can be advanced to supervisory or managerial positions.

SEWING MACHINES MECHANICS

First Quarter

SMM 111 - Introduction to Sewing Industry

SMM 112 - Factory Methods

SMM 113 - Garment Construction

Second Quarter

SMM 121 - Lockstitch Formation

SMM 122 - Lockstitch Machines I

SMM 172 - Servicing Lockstitch Machines Lab

Third Quarter

SMM 131 - Chainstitch Formations I

SMM 181 - Chainstitch Machines Lab

SMM 182 - Servicing Chainstitch Machines Lab

Fourth Quarter

SMM 141 & 191-Timing Sewing Machines & Timing Sewing
Machines Lab

SMM 142 - Special Machines

SMM 192 - Special Machines Lab

Fifth Quarter

SMM 211 - Special Attachments I

SMM 261 - Special Attachments II

Sixth Quarter

SMM 212 - Auxiliary Equipment I

SMM 262 - Auxiliary Equipment II

SEWING MACHINES MECHANICS COURSE DESCRIPTIONS

SMM 111-Introduction to Sewing Industry

This course is an introduction to history of the development of the sewing machine with general nomenclature of sewing machine parts. Includes shop safety (OHS) and job opportunities for sewing machine mechanics.

SMM 112-Factory Methods

This course helps the student develop an understanding of assembly line organization and layout for garment factory operations. Includes machines used for different types of garments.

SMM 113-Garment Construction

This course teaches the types of cloth, thread and needles and cutting techniques used in garment construction.

SMM 121-Lockstitch Formation

This course teaches the identification of basic lockstitches and seams with the recognition of various problems.

SMM 122-Lockstitch Machines I

This course helps the student to develop proficiency in the

identification, disassembly, cleaning, and lubrication of lockstitch machines.

SMM 172-Servicing Lockstitch Machines Lab

This course helps to expand the student's ability in adjusting, repairing, and maintaining lockstitch machines.

SMM 131-Chainstitch Formations I

Identification of Basic Chain-stitch and seams with recognition of various problems.

SMM 181-Chainstitch Machines Lab

This course helps the student to develop proficiency in the identification, disassembly, cleaning, and lubrication of chainstitch machines.

SMM 182-Servicing Chainstitch Machines Lab

This course helps to expand the student's ability in adjusting, repairing, and maintaining chainstitch machines.

SMM 141 & 191-Timing Sewing Machines & Timing Sewing Machines Lab

This course teaches the student the practical application of timing of lockstitch and chainstitch machines by manual.

SMM 142-Special Machines

This course helps the student develop a more indepth knowledge of the identification, disassembly and lubrication of special machines including button sewing, bar tack, and multi-needle machines.

SMM 192-Special Machines Lab

This course is a continuation of adjusting, repairing, and maintaining special machines, including button sewing, bar tack, and multi-needle machines.

SMM 211-Special Attachments I

This course introduces and teaches the students to make, adjust, repair, and maintain special attachments; such as pneumatic and electrical controls and devices, and jigs and folders.

SMM 261-Special Attachments II
Laboratory application for Special Attachments I.

SMM 212-Auxiliary Equipment I

This course is designed to help the students master the art of preventive maintenance by learning to adjust, repair, and maintain equipment such as steam boilers, heating and cooling units, and pressing and fusing machines.

SMM 262-Auxiliary Equipment II

Laboratory applications for Auxiliary Equipment I.

SMALL ENGINE REPAIR

5 Quarters

The Small Engine Mechanic uses common tools such as wrenches and other hand tools as well as special tools designed for working with hard-to-remove parts. Special testing equipment is also used to make problems easier to diagnose.

In diagnosing malfunctions, the mechanic may use special testing equipment and "strip down" some components for closer examination. Once the defective parts are located, the mechanic repairs or replaces them.

SMALL ENGINE REPAIR

First Quarter

SE 111 - Orientation and Shop Safety

SE 112 & 162 - Two and Four Cycle Engines & Two and Four Cycle Engine Lab

SE 121 & 171 - Blades, Clutches, and Drive Mechanism & Blades, Clutches, and Drive Mechanism Lab

Second Quarter

SE 122 & 172 - Tune-up and Tune-up Lab

SE 123 & 173 - Carburetion and Fuel System & Carburetion and Fuel Systems Lab

Third Quarter

SE 131 & 181 - Basic Welding and Basic Welding Lab

SE 132 & 182 - Electrical Systems & Electrical Systems Lab

SE 133 & 183 - Chain Saw & Chain Saw Lab

SE 134 & 184 - Troubleshooting & Troubleshooting Lab

Fourth Quarter

SE 141 & 191 - Marine Engines & Marine Engines Lab

Fifth Quarter

SE 211 & 261 - Motorcycle & Motorcycle Lab

SMALL ENGINE REPAIR COURSE DESCRIPTIONS

SE 111-Orientation and Shop Safety

Acquaints the students with course objectives, class policies and procedures, proper use of hand and power tools, and overall safety practices.

SE 112 & 162-Two and

SE 112 & 162-Two and Four Cycle Engines & Two and Four Cycle Engines Lab

An indepth study of the principles with practical applications of the two and four cycle engines. This includes disassembling, inspection, rebuilding, reassembling, tune-up service maintenance, etc.

SE 121 & 171-Blades, Clutches and Drive Mechanisms & Blades, Clutches, and Drive Mechanisms Lab

A complete study of all types of clutches, belts and drive mechanisms such as transmissions and differentials. Live work projects are available for practical applications.

SE 122 & 172-Tune-up and Tune-up Lab

Fundamentals of minor and major tune-up of the small gasoline engine. Emphasis is placed on systematic approaches and the time element. Live work projects are used in the lab.

SE 123 & 173-Carburetion and Fuel Systems and Carburetion and Fuel Systems Lab

A study of the major carburetors, fuel pumps, lines, filters and tanks. Practical applications are carried out in the shop utilizing prescribed safety standards.

SE 131 & 181-Basic Welding and Basic Welding Lab

Theory and operation of oxyacetylene system--welding, brazing and cutting; also a study of the electric-arc welding methods is covered. These processes are used on many of the projects run through the lab shop.

SE 132 & 182-Electrical Systems and Electrical Systems Lab

A basic study of electricity, magnetic properties, generators, alternators, starter motors, coils, condensers, batteries, battery ignition systems and solid state ignition systems.

Hands on experience is provided in the lab.

SE 133 & 183-Chain Saw and Chain Saw Lab

Theory and practical studies on the various processes of inspecting and repairing chain saws. The laboratory provides actual work experience.

SE 134 & 184-Troubleshooting and Troubleshooting Lab

Diagnosis of problems by visual inspection and simple test procedures to determine the time and parts needed to make repairs. Students are given actual problems in the shop on which to practice the theory taught in the classroom.

SE 141 & 191-Marine Engines and Marine Engines Lab

A comprehensive study of power heads, magnets, starters, fuel systems, and other major components of marine engines. The laboratory will provide opportunities to disassemble, clean, inspect and reassemble these major components.

SE 211 & 261-Motorcycle and Motorcycle Lab

An indepth study of engines, metric measuring, wheels, brakes, carburetors, exhaust systems, electrical systems, clutches, cables, fuel, lubricants and suspension transmissions. The Ken Cook Training Unit is utilized. Live Work is provided for actual experience.

UPHOLSTERY

8 Quarters

No home is complete without some type of upholstered furniture. Furniture upholstery involves a mastery of techniques on a wide variety of pieces ranging from elaborate settees and upholstered chairs to recreation room furniture and inexpensive dinette sets. Upholstered furniture is covered with leather, brocade, velveteen, rayon, cotton, wool, fabric blends, and plastic. Some pieces are tufted or piped, others plain, some have braiding or welt around the sides, and others are trimmed with bright upholstery tacks.

Whatever the type of covering, style, or decoration, all upholstered furniture is the handwork of a group of skilled craftsmen known as upholsterers.

Upholstery is not only confined to furniture for the home, but also includes the interior of automobiles.

UPHOLSTERY

First Quarter

UP 111 - Introduction to Upholstery and Course Orientation
UP 113 - Tools and Equipment

Second Quarter

UP 121 - Stripping and General Repairing
UP 171 - Stripping and General Repairing Lab

Third Quarter

UP 131 - Padding and Stuffing
UP 172 - Padding and Stuffing Lab

Fourth Quarter

UP 141 - Sewing Machine Measuring
UP 191 - Sewing Machine Measuring Lab
UP 142 - General Repair
UP 192 - General Repair Lab

Fifth Quarter

UP 211 - Job Planning and Auto Upholstering
UP 261 - Job Planning and Auto Upholstering Lab

Sixth Quarter

UP 221 - General Repair II
UP 271 - General Repair Lab II
UP 222 - Coverings
UP 272 - Coverings Lab

Seventh Quarter

UP 231 - Decorative Trim Work
UP 281 - Decorative Trim Work Lab
UP 232 - Finishing, Refinishing and Touch-Up
UP 282 - Finishing, Refinishing and Touch-UP Lab

Eighth Quarter

UP 241 - General Repair III
UP 291 - General Repair III Lab
UP 242 - Layout for Tufting
UP 292 - Layout for Tufting Lab
UP 243 - Automobile Upholstery
UP 293 - Automobile Upholstery Lab

UPHOLSTERY COURSE DESCRIPTIONS

UP 111-Introduction to Upholstery and Course Orientation

This includes a brief history of upholstery, course requirements, housekeeping, safety and class standards.

UP 113-Tools and Equipment

This course teaches the student how to identify and properly use tools and equipment required for course. Safety precautions are stressed.

UP 121-Stripping and General Repairing

Principles of stripping frames, replacing broken parts and gluing.

UP 171-Stripping and General Repairing Lab

Practical applications of UP 121.

UP 131-Padding and Stuffing

A series of studies on procedures of padding and stuffing. Flat, crowned and overstuffed methods are involved.

UP 172-Padding and Stuffing Lab

Training sessions using live work to teach the principles learned in UP 121.

UP 141-Sewing Machine Measuring

Theory classes on layout for tufting, paneling, piping, gimping and making skirts and pillows.

UP 191-Sewing Machine Measuring Lab

Practical applications for theories studied in the classroom.

UP 142-General Repair

Emphasis on padding, making welt, sewing corners and curves.

UP 192-General Repair Lab

Laboratory experiences in general repair principles.

UP 211-Job Planning and Auto Upholstering

Measuring, recording and determining texture and nature of materials.

UP 261-Job Planning and Auto Upholstering Lab

Applying methods and procedures taught using live work projects.

UP 221-General Repair II

Advanced theory classes in methods and procedures of general repair.

UP 271-General Repair II Lab

Laboratory experiences for UP 212.

UP 121-Stripping and General Repairing

Principles of stripping frames, replacing broken parts and gluing.

UP 171-Stripping and General Repairing Lab

Practical applications of UP 121.

UP 131-Padding and Stuffing

A series of studies on procedures of padding and stuffing. Flat, crowned and overstuffed methods are involved.

UP 172-Padding and Stuffing Lab

Training sessions using live work to teach the principles learned in UP 121.

UP 141-Sewing Machine Measuring

Theory classes on layout for tufting, paneling, piping, gimping and making skirts and pillows.

UP 191-Sewing Machine Measuring Lab

Practical applications for theories studied in the classroom.

UP 142-General Repair

Emphasis on padding, making welt, sewing corners and curves.

UP 192-General Repair Lab

Laboratory experiences in general repair principles.

UP 211-Job Planning and Auto Upholstering

Measuring, recording and determining texture and nature of materials.

UP 261-Job Planning and Auto Upholstering Lab

Applying methods and procedures taught using live work projects.

UP 221-General Repair II

Advanced theory classes in methods and procedures of general repair.

UP 271-General Repair II Lab

Laboratory experiences for UP 212.

UP 222-Coverings

A comprehensive study of flat surfaces, bases, arms, backs, cushions and pillows.

UP 272-Coverings Lab

Actual experiences are provided in lab for the theories taught in the classroom.

UP 231-Decorative Trim Work

Theory lessons on the finishing touches of jobs such as french tufting and buttoning, piping and channeling, paneling, skirting and gimping.

UP 281-Decorative Trim Work Lab

Live work experiences in decorative trim projects.

UP 232-Finishing, Refinishing and Touch—Up

This class exposes the student to the principles on repairing the woodwork of furniture. Included are stripping, sanding, staining, painting and spraying methods and procedures.

UP 282-Finishing, Refinishing & Touch-Up Lab

Laboratory training sessions on the various methods of finishing and refinishing furniture.

UP 241-General Repair III

Advanced principles in all skills involved in upholstery. This will include touch-up and polishing, replacing broken parts, proper use of tools, setting, spring tying, edging, burlap, padding designs, welting and sewing covers.

UP 291-General Repair III Lab

Advanced live work experiences on all segments of upholstery.

UP 242-Layout for Tufting

A study of all types of tufting including French tufting. This course also involves theory lessons on piping, channeling, paneling, gimping, skirtings and buttoning.

UP 292-Layout for Tufting Lab

Students are provided opportunities to practice the theory learned in the classroom.

UP 243-Automobile Upholstery

Theory classes in three levels of auto trim and parts. Studies will include procedures for upholstering seats, door panels, carpeting, arm rests, deck panels, sunvisors, etc.

UP 293-Automobile Upholstery Lab

Application of theory is carried out on live work brought into the shop.

RELATED INSTRUCTION

Related instruction includes communicative skills and mathematics that are directly related to the course requirements for each occupation. All students who enroll at Fredd State must take at least one related subject in each of the major areas. Some students may be required to take several related courses. The number of related courses that a student may be required to take is determined by the program pursued and test results on the California Achievement Test given by the college after the student has enrolled.

RELATED SUBJECTS COURSE DESCRIPTIONS**EH 101-Related Communications**

To help students acquire knowledge and skills in basic communications and develop personal qualities which contribute to job success.

EH 102-Language Skills

This course is designed to improve communication skills as these skills relate to job success. The course content includes practical learning activities which will help the students in their occupational goals and in finding, getting, and keeping a job.

EH 103-Job Procedures

Assistance is given in the preparation of applications, writing business letters, and preparation of job interviews.

MH 111-Basic Mathematics

Basic Mathematics is designed to give the student a chance to

develop basic skills in mathematics necessary for his studies and on-the-job activities in trade and technical areas. An effort is made to relate mathematics to the student's core subject by using numerous examples taken from the experience of persons in his trade.

MH 113-Algebra I

A study of basic concepts and operations of Algebra; Algebraic symbols; signed numbers, equations of first degree; special products and factoring-fractions and applications.

MH 114-Algebra II

This course is designed to train the student in mathematical skills required in our technical and industrial society. The course consists of a review of systems of equations in two and three unknowns-use of determinants in solving simultaneous equations; exponents, roots and radicals; logarithms and applications; quadratic equations; variation; and graphical methods.

MH 115-Trigonometry

This course consists of; a study of Trigonometric Functions and Relations; a review of angles as related to the coordinate plane; angles of triangles; solutions of triangles; vectors and complex numbers. Prerequisite: Algebra II

MH 211-Calculus and Analytic Geometry

This course includes a review of the fundamentals of Algebra, the solution of problems involving the Conics of analytic geometry; the theory of limits; the derivatives of simple algebraic equations; finding maxima and minima points of a curve. Prerequisites: Trigonometry or Equivalent.

MH 221-Calculus II

This course is a continuation of Calculus I. Problems of Volumes, Area and Centroids are solved by Methods of Integration and Derivation. Finding Derivatives of Trigonometric Functions and Logarithmic Equation Solutions of Higher Degree Equations will be studied. Prerequisite: Calculus I.

MH 231-Calculus III

Calculus III is a continuation of Calculus II. Solutions are found by various methods of integration, by partial derivatives and double integrals. First order differential equations are solved. Prerequisite: Calculus II or Equivalent.

PREVOCATIONAL STUDIES

PREVOCATIONAL ENGLISH

Prevocational English is designed for use in adult education classes, particularly for the disadvantaged. Students in such classes have not indicated through testing, the functional skills needed for basic English grammar or reading ability. This course provides a flexible reading and grammar program that is adjusted at each individual level of advancement to the wide variations in the student's individual ability, characteristics, and grammatical as well as reading needs. The program emphasizes reading for understanding, thinking, and learning.

PREVOCATIONAL MATHEMATICS

Prevocational Mathematics is designed for use in adult education classes, particular classes for the disadvantaged. Students in such classes usually have not indicated, through testing, the functional skills needed to read and write numerals properly. Without presuming prior knowledge on the part of the student, the course develops an understanding of why as well as how to perform the fundamental operations in mathematics through the use of detailed explanations and examples, number lines and other illustrations including the basic facts of addition, subtraction, multiplication, and division.

ADMINISTRATIVE STAFF

N. C. Cephus	President
Ronnie Rose	Business Manager
Horace B. Whitfield	Dean of Student Services
Richard Moton	Night Coordinator
Louise B. Lewis	Financial Aid Officer
Shirley B. Spencer	Registrar
Eliza B. Smith	Accountant
Joe Ann Cousette	Secretary
Minnette L. Smith	Cashier

FACULTY MEMBERS

Bennett, Ruby	Related English
Blackmon, Jr., James	Barbering
Boyd, Eleanor G.	Commercial Sewing and Tailoring
Burton, Johnny	Body and Fender Repair
Byrd, Edith	Remedial English
Craig, George T.	Sewing Machine Mechanics
Ellis, Riley (evening)	Body and Fender Repair
Fredd, Jr., C. A.	Electricity
Freed, John L.	Graphic Arts
Gaines, S. N.	Radio & Television Repair
Gibson, Sadie	Secretarial
Gray, Willie M.	Secretarial
King, Gerald (evening)	Radio & Television Repair
Lewis, Mina (evening)	Masonry
McKanstry, Shelly (evening)	Secretarial
Martin, Robert T. (evening)	Plumbing and Pipefitting
Martin, Jr., Robert T.	Plumbing and Pipefitting
Morrow, Johnny	Small Engines
Morrow, Union B.	Masonry
Pendley, Patsy	Commercial Sewing and Tailoring
Rodgers, William L.	Related Mathematics
Rodgers, Yvonne	Secretarial
Rogers, George F.	Upholstery
Ware, Annie J. (evening)	Commercial Sewing & Tailoring
Wells, Mary (evening)	Secretarial
Wilder, Samuel J.	Carpentry

MAINTENANCE STAFF

Burns, Henry	Maintenance/Security
Mays, Jessie	Supt. of Buildings and Grounds
Milton, Queen (Part-time)	Custodial
Morrow, Samuel	Security
Short, Nathaniel	Maintenance

CAFETERIA STAFF

Conners, Shelia	Cook
Perry, Delois	Manager

TRANSPORTATION

Rogers, Andrew	Supervisor and Mechanic
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